BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking to Integrate and Refine Procurement Policies and Consider Long-Term Procurement Plans.	Rulemaking 12-03-014 (Filed March 22, 2012)

COMMENTS OF THE CALIFORNIA COGENERATION COUNCIL ON TRACK 4 ISSUES

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On behalf of
CALIFORNIA COGENERATION COUNCIL

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At the prehearing conference in this proceeding on September 4, 2013 and in a subsequent September 16, 2013 ruling concerning the Track 2 and Track 4 schedules (Ruling) for this long-term procurement planning (LTPP) case, the assigned commissioner and presiding administrative law judge (ALJ) invited parties to provide comments on certain issues in Track 4. As described by the ALJ at the PHC, these issues involve questions of policy, and parties were invited to file comments in lieu of testimony that would otherwise be due today.[1] The California Cogeneration Council (CCC)[2] respectfully takes this opportunity to present its comments in lieu of testimony on several of these issues.

1. ALJ Question 1: "does it matter which resources are procured [in this Track 4] or what the mix of resources would be?" (PHC Transcript, at 317)

The CCC's answer is that, yes, it matters. New capacity is likely to be needed to meet local capacity requirements (LCR) in the Los Angeles (LA) Basin and San Diego areas, as a result of the retirement of the San Onofre Nuclear Generation Station

[1] Ruling, at 4-5.

[2] The CCC is an *ad hoc* association of natural gas-fired cogenerators located throughout California, in the service territories of all three of California's major investor-owned electric utilities (IOUs) - Pacific Gas & Electric Company (PG&E), Southern California Edison (Edison), and San Diego Gas & Electric (SDG&E). CCC member facilities are certified as qualifying facilities (QFs) pursuant to the Public Utility Regulatory Policies Act of 1978 (PURPA). In aggregate, CCC members' 31 different cogeneration projects in California generate about 1,300 megawatts (MWs), most of which is sold to the California IOUs. The CCC represents a significant share of the distributed combined heat and power (CHP) projects now operating in California.

(SONGS). This need for LCR capacity should be served with a mix that includes both transmission and generation, demand- and supply-side resources, gas-fired and renewable units, and preferred and conventional resources. This was also the position of the CCC and many other parties in Track 1 of this case, in which the Commission approved new LCR procurement to replace the conventional, once-through cooling (OTC) capacity which will retire later this decade. The CCC was pleased that the Commission, in D. 13-02-015, authorized SCE to procure a mix of conventional gas-fired, preferred, and storage resources to replace the OTC capacity in its service territory. Both SCE and SDG&E appear to have absorbed the policy message of D. 13-02-015, and are now proposing to meet LCR needs in the LA Basin resulting from the SONGS shutdown with a mix of a transmission upgrade (SCE's Mesa Loop-in project) and limited additional procurement of new generation. The utilities also have taken the initiative to encourage the siting of preferred resources in areas on the SCE and SDG&E systems that are most impacted by the closure of SONGS. For these reasons, CCC broadly supports the direction of SCE's and SDG&E's Track 4 proposals.

The CCC's principal policy concern with the mix of resources that SCE has proposed is SCE's apparent to attempt in its Track 4 testimony to change the definition of a "preferred resource," such that the definition would exclude CHP projects. SCE's Track 4 testimony includes footnote 29 on page 55 which states: "Preferred Resources do not include Combined Heat & Power (CHP) resources for LCR procurement purposes." CHP resources do not appear to be included in the SCE's proposed programs, such as its proposed "Living Pilot," that are intended to encourage the development of preferred resources in areas where capacity would be most effective at replacing SONGS's local capacity.[3] In support of its position, SCE cites, with no discussion, footnote 211 on page 82 of D.13-02-015. This footnote states: "Conventional gas-fired generation includes CHP resources that are electrically equivalent to conventional generation;" the footnote is attached to a summary reference to the "1000 - 1200 MW of conventional gas-fired

[3] With respect to the preferred resources that would be part of the Living Pilot, SCE states, at page 53 of its testimony, that "SCE expects these Preferred Resources to include expanded EE programs, commercial rooftop solar, Energy Storage and expansion of demand DR programs in the local area." This list does not include CHP.

generation" which D. 13-02-015 authorized. This footnote in D. 13-02-015 replaced a footnote (No. 200) in the Track 1 Proposed Decision which stated: "Conventional gas-fired generation does not include CHP." D. 13-02-015, at page 119, states that "A footnote in the PD is modified to allow certain CHP resources to qualify as part of the 1000 to 1200 MW requirement for conventional gas-fired resources in the LA Basin." There is nothing in footnote 211 or in the explanation on page 119 which indicates that the Commission meant to change the status of CHP such that CHP would no longer be a "preferred" resource. The CCC is not aware of any proposal in Track 1 to make such a policy change, and there is certainly no discussion in these footnotes or in the text of D. 13-02-015 indicating such a policy change. The CCC believes that the intent of this change was not to alter the status of CHP as a preferred resource, but instead simply to allow CHP procured to meet LCR needs to count against the authorized procurement for conventional gas-fired generation, thus making more megawatts available for other types of preferred resources within the 150 to 600 MW of preferred resource procurement authorized by that order. This assignment of CHP capacity to count against the conventional gas-fired procurement also recognized that firm, baseload CHP can be as effective electrically as conventional gas-fired generation at meeting LCR needs.

This interpretation of D. 13-02-015 is supported by other portions of that decision in which the Commission could not have been more clear or more explicit that CHP is a preferred resource:

- D. 13-02-15, at page 3: "[p]referred resources include energy efficiency, demand response, and distributed generation including combined heat and power." (emphasis added)
- D. 13-02-015, at page 80: "SCE's process for balancing objectives with regard to demand reduction resources is reasonable. We will also require SCE to apply a similar balancing to all preferred resources; we agree with SCE's recommended approach to pursue the most competitively-priced CHP and renewable resources, consistent with meeting LCR locational needs and technical characteristics. The remainder of SCE's LCR need will need to be met by supply-side resources and cost-effective transmission upgrades.

A definition of "preferred resources" that includes CHP is consistent with the "loading order" for long-term electric resources that the state has adopted in its Energy Action Plans.[4] The first priority in California's adopted loading order is to encourage energy efficiency and demand response; the second priority is to stimulate the development of renewable generation and distributed generation, including efficient CHP facilities. Thus, Energy Action Plan II states: "[a]fter cost-effective efficiency and demand response, we rely on renewable sources of power and distributed generation, such as combined heat and power applications."[5] There is nothing in D. 13-02-015 which indicates any change of the status of CHP in the state's loading order, or of the treatment of CHP as a preferred resource.

If CHP were to be "demoted" from a preferred resource to the same priority as conventional gas-fired generation, as SCE apparently proposes, CHP resources would have to compete directly with conventional combined-cycle and combustion turbine units in RFOs and bilateral negotiations to meet LCR needs. As noted in D. 13-02-015 at pages 86-87, SCE's witness Mr. Cushnie testified in the Track 1 hearings that preferred resources have never been selected in an all-source RFO involving conventional gas-fired resources. Forcing CHP resources to compete directly with conventional gas-fired units not only would be contrary to the loading order, such a result also would be contrary to the Track 1 decision and to SCE's own plan to implement that order. SCE's Track 1 LCR Procurement Plan, filed August 28, 2013, makes clear that the utility will use existing CHP procurement processes such as the CHP RFOs, as well as LCR RFOs and bilateral negotiations, to procure new CHP that is located to satisfy LCR needs, with contractual changes to ensure that new CHP resources can be on-line in time to meet LCR needs.[6] Under the QF/CHP Settlement which the Commission adopted in D. 10-12-035, in CHP RFOs, CHP projects compete only against other CHP projects.

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[4] The state's adopted "loading order" for new resources is summarized in the Energy Action Plan II adopted by this Commission and the California Energy Commission in October 2005, at page 2. See http://docs.cpuc.ca.gov/word_pdf/REPORT/51604.pdf .

[5] *Ibid.*

[6] SCE Track 1 LCR Procurement Plan, filed August 28, 2013 in this docket, at 27-28 and 56-57.

When SCE evaluates bids from CHP units that can meet LCR needs, the utility should compare them against bids from other preferred supply-side resources (or against the costs of demand-side programs) that also are located to supply LCR capacity. As a preferred resource, CHP should not have to compete in Local Capacity RFOs directly against conventional gas-fired generation in order for its value as local capacity to be recognized.

2. ALJ Question 7: "If you're recommending preferred resources or energy storage to fill any need, it would be helpful to indicate how the attributes of such resources will meet LCR needs." (PHC Transcript, at 319)

CHP units are designed to supply thermal energy and electricity to large commercial and industrial energy consumers, with excess power exported to the grid. The customers of CHP facilities typically require thermal energy on a consistent basis; as a result, CHP facilities often operate as baseload units, like SONGS, with capacity factors of 80% - 90%. CHP units are fired by natural gas, and thus are reliable sources of firm capacity. Thousands of MWs of CHP capacity were developed in California as qualifying facilities (QFs) in the 1980s, and have provided SCE and SDG&E with reliable firm – and local – capacity for the last 25 years. How effective CHP units are at supplying LCR needs obviously depends on their location, but there should be no issue with their ability to operate as baseload units and to supply reliable local capacity.

The CCC also would like to highlight the implications of the fact that CHP units are located at sites with significant thermal loads. As a result, there is significant existing CHP capacity in the LA Basin and San Diego load centers of SCE and SDG&E. There are 650 MW of CCC members' projects in the SCE and SDG&E service territories; out of this 650 MW, 550 MW (or 85%) are located in the LA Basin, San Diego, and Big Creek / Ventura local areas, with 340 MW (52%) in the LA Basin and San Diego areas.[7] Based on the most recent QF status reports submitted semi-annually to the Commission, out of the 3,104 MW of CHP QFs in the service territories of and selling power to SCE and SDG&E, 1,710 MW (or 55%) are located in the LA Basin, San Diego, and Big Creek

[7] *See* http://www.californiacogenerationcouncil.com/plant%20map.html . This map does not include the 49.9 MW Goal Line facility in Escondido, California.

/ Ventura local areas.[8] Thus, over 50% of the CHP capacity in southern California contributes to meeting LA Basin, San Diego, and Big Creek / Ventura LCR needs. Given this distribution of existing thermal loads served by CHP, the CCC believes that 50% or more of the potential CHP capacity in southern California would satisfy LCR needs. A consultant retained by the California Energy Commission (CEC) has estimated this CHP market potential, shown in **Table 1** below, for three scenarios representing different levels of policy support for new CHP development. This estimate of CHP market potential in southern California was prepared for the CEC's *2012 Integrated Energy Policy Report Update* (2012 IEPR). CPUC Energy Division staff has used these CEC projections as the basis for the CHP planning assumptions in Track 2 of this case.[9]

Table 1: CEC / ICF Report Projections for CHP Capacity (MW)

	Market Potential for New CHP in 2020		
IOU	Base	Medium	High
SCE	326	621	1,399
SDG&E	128	231	395
Total	454	852	1,794

Source: CEC consultant report, "The Technical and Market Potential for New CHP in California" (ICF International), Appendix D. These figures do not include CHP for cooling applications. The CEC / ICF Report is available at http://www.energy.ca.gov/2012publications/CEC-200-2012-002/CEC-200-2012-002-REV.pdf.

Thus, assuming that half of this market potential is located where it can meet LCR needs, in the medium scenario there appears to be more than 400 MW of new CHP potential in the affected SCE and SDG&E LCR areas.

Finally, the CCC would like to underline the fact that there are 1,710 MW of existing QF / CHP capacity in the SCE and SDG&E LCR areas. The Commission's CHP Program has set a goal for the three IOUs to contract with 3,000 MW of existing or new

[8] Based on the July 2013 QF status reports submitted to the Commission. See http://www.cpuc.ca.gov/PUC/energy/CHP/, under "QF Semi-Annual Reports." These figures do not include the Gilroy and Los Medanos plants in PG&E's service territory which have contracted with SCE.

[9] See D. 12-12-010, at 25.

CHP capacity by 2015.[10] A central goal of the CHP Program is to retain existing, efficient CHP capacity, so that this capacity continues to serve the IOUs. Clearly, if the 1,700 MW of QF / CHP capacity in the LA Basin and San Diego is not re-contracted, the utilities will have to procure additional amounts of LCR capacity, in addition to the capacity needed to replace the 2,200 MW of SONGS capacity. For example, SDG&E's testimony in this case notes that 88 MW of CHP capacity which has long served the Navy in San Diego is expected to retire in 2019 (these projects are CCC members). The CCC agrees that, if this CHP retirement happens, it will increase SDG&E's LCR needs by 88 MW.[11] The CPUC Energy Division maintains a database of the CHP capacity which has been contracted toward SCE's CHP Program goal of 1,402 MW and SDG&E's goal of 160 MW.[12] Review of the most recent version of this database shows that none of the 562 MW of CHP capacity that SCE has contracted to date and has counted toward its 1,402 MW goal is located in the LA Basin.[13] Similarly, none of the 56 MW of CHP capacity which SDG&E has contracted toward its CHP Program goal is located in its LCR area.[14] If this trend continues, the SCE and SDG&E LCR needs will be significantly higher than the IOUs have estimated.

In conclusion, the CCC emphasizes that re-contracting with existing CHP capacity located in LCR areas should be as much a priority for SCE and SDG&E as contracting for new LCR capacity of any kind, especially given that it will be far less expensive to retain existing CHP capacity that has long contributed to serving LCR needs than to build or procure capacity from new resources.

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[10] See the QF/CHP Settlement adopted in D. 10-12-035.

[11] SDG&E Track 4 Testimony (Anderson), at 9 and Table 2.

[12] See http://www.cpuc.ca.gov/PUC/energy/CHP/ , under "CHP Program Semi-Annual Reports."

[13] The 562 MW total excludes the capacity of the Harbor Cogeneration project, whose new CHP contract the Commission recently rejected, as well as the Commission-ordered reductions in the capacity of the Gilroy and Los Medanos CHP contracts. See CPUC Resolutions E-4569 and E-4554. SCE has contracted for 48 MW of non-CHP capacity from the Carson Cogeneration project, in Carson near Long Beach in the western LA Basin LCR area. Carson Cogeneration will operate under a Utility Prescheduled Facility (UPF) contract, without serving a thermal load and thus without the efficiency or greenhouse gas reduction benefits of CHP. This capacity does not count toward the SCE CHP Program target.

[14] SDG&E's 56 MW is from the Jasmin III new CHP project, located in Kern County near Bakersfield. See SDG&E Advice Letter 2501-E, filed July 3, 2013.

The CCC appreciates the Commission's attention to these comments, and looks forward to further participation in a proceeding that will have a significant impact on the future mix of electric resources in southern California.

Respectfully submitted,

/ s /

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